Comparisons of Job Characteristics

Focus Occupation: Agricultural Engineers (17-2021)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 34

Focus Occupation: Agricultural Engineers (17-2021)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Biology	3.7	10.1	11.0	0	Current knowledge level may be sufficient
Chemistry	4.8	10.0	12.1	>	Current knowledge level is likely sufficient
Food Production	2.1	9.1	11.4	>	Current knowledge level is likely sufficient
Production and Processing	6.0	9.1	12.2	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Agricultural Engineers (17-2021)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Writing	9.2	10.7	14.2	>>	Skill level is likely more than sufficient
Mathematics	6.2	7.9	12.0	>>	Skill level is likely more than sufficient
Science	4.5	7.8	9.7	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 96

Focus Occupation: Agricultural Engineers (17-2021)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Expression	12.4	12.0	14.8	>	Current ability level is likely sufficient
Oral Comprehension	12.5	11.8	14.3	>	Current ability level is likely sufficient
Written Expression	9.8	11.4	14.5	>>	Current ability level is likely more than sufficient
Written Comprehension	11.0	11.2	15.2	>>	Current ability level is likely more than sufficient
Near Vision	11.1	10.7	12.2	>	Current ability level is likely sufficient
Problem Sensitivity	11.1	10.7	13.9	>>	Current ability level is likely more than sufficient
Deductive Reasoning	10.6	10.3	13.9	>>	Current ability level is likely more than sufficient
Inductive Reasoning	10.2	10.0	14.0	>>	Current ability level is likely more than sufficient
Category Flexibility	9.0	9.5	12.2	>>	Current ability level is likely more than sufficient
Mathematical Reasoning	6.3	8.5	11.5	>>	Current ability level is likely more than sufficient
Number Facility	6.3	7.4	11.0	>>	Current ability level is likely more than sufficient
Time Sharing	6.6	7.1	7.5	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 73

Focus Occupation: Agricultural Engineers (17-2021)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Work Activities	Exclusivity of Activity
Analyze scientific research data or investigative findings	27
Collect scientific or technical data	30
Communicate technical information	4
Compile numerical or statistical data	38
Develop or maintain databases	30
Develop tables depicting data	33
Perform safety inspections in agricultural, forestry, or fishing setting	77
Perform statistical analysis	71
Prepare reports	8
Use biological research techniques	68
Use computers to enter, access or retrieve data	3
Use government regulations	44
Use hazardous materials information	35
Use mathematical or statistical methods to identify or analyze problems	30
Use quantitative research methods	35
Use relational database software	26

Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17
Work as a team member	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Agricultural Engineers (17-2021)
Associated Occupation: Agricultural and Food Science Technicians (19-4011)

Tools and Technologies	Exclusivity
Computer printers	2
Computers	1
Content authoring and editing software	1
Industry specific software	1
Information exchange software	1
Network applications software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.